

### REMARKS/ARGUMENTS

In view of the foregoing amendments and the following remarks, the applicant respectfully submits that the pending claims are not unpatentable under 35 U.S.C. § 103. Accordingly, it is believed that this application is in condition for allowance. **If, however, the Examiner believes that there are any unresolved issues, or believes that some or all of the claims are not in condition for allowance, the applicant respectfully requests that the Examiner contact the undersigned to schedule a telephone Examiner Interview before any further actions on the merits.**

The applicant will now address each of the issues raised in the outstanding Office Action.

#### Rejections under 35 U.S.C. § 103

##### ***Claims 1, 12 and 20***

Claims 1, 12 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,905,781 ("the McHale patent") in view of U.S. Patent No. 6,587,877 ("the Dougliis patent"). The applicant respectfully requests that the Examiner reconsider and withdraw this ground of rejection in view of the following.

As amended, independent claims 1, 12 and 20 are not rendered obvious by the McHale and Dougliis patents because these patents, either taken alone or in combination, neither teach, nor suggest, selecting, in a premises system having at least one terminal, a local

area network including the at least one terminal, and coupled with units terminating at least two communications links from the premises to a communications provider facility, one of the communications links if it is determined that data accepted concerns establishing a connection, nor do they teach or suggest means for such communications link selecting. Further, one skilled in the art would not have been motivated to combine the purported teachings of the McHale and Dougliis patents as proposed by the Examiner.

Each of the foregoing issues is discussed below. First, however, the present invention and the system of the McHale application are introduced. The present invention solves the potential problems of looping and race conditions that might otherwise occur if terminating units of at a customer premises are on a LAN and the terminals want to establish a session using a protocol that broadcasts discovery initiation messages, as is the case with PPPoE. (See, e.g., Figure 15 and page 28, line 11 through page 32, line 11 of the specification.) Figures 18 and 23 illustrate two exemplary architectures for avoiding these problems. Notice that the present invention may be performed at a customer premises.

The McHale patent seeks to allow a service provider to avoid the need to provide a XDSL facility for each customer. In this regard, the McHale patent states:

One important technical advantage of the present invention is the ability to over-subscribe the XDSL communication facilities of the communication server 58 to service an increasing number of subscribers 12 in communication system 10.

Column 6, lines 20-25. This is an application of the classic technique of concentration. For example, the McHale system may be used to enable one thousand data lines (from subscribers 12) to share one hundred modems in a modem pool. (See, e.g., column 8, lines 31-41.) More specifically, referring to Figure 2, a switch 70 of a communications server 58 is controlled by controller 80 to select a modem of the modem pool 74. Referring to Figure 1, the communications server 58 is provided at a service provider station 14 and handles data from a number of subscribers 12 coupled with the station 14 via local loop twisted pairs 16. A splitter 50 functions to separate voice and data for communications over a voice network (POTS) and a data network 64. Note that each subscriber 12 has a single twisted pair link 16 with the station 14.

As amended, independent claims 1, 12 and 20 recite an act of, or means for, selecting, in a premises system having at least one terminal, a local area network including the at least one terminal, and coupled with units terminating at least two communications links from the premises to a communications provider facility, one of the communications links (e.g., if it is determined that data accepted concerns establishing a connection).

The selection of a modem of a modem pool 72 at a station 14 in the McHale patent neither teaches, nor suggests, selecting a link between a premises and a communications provider facility. The purported teaching from the Douglass patent of selecting using a policy does not compensate for this deficiency of the McHale patent with respect to claims 1, 12 and 20. Accordingly, these

claims are not rendered obvious by the McHale and Douglas patents for at least this reason.

Moreover, one skilled in the art would not have been motivated to combine the purported teachings of the McHale and Douglas patents as proposed by the Examiner. More specifically, the Examiner relies on the Douglas patent for teaching selection of a communications link based on policy. (See Paper No. 6, page 3.) However, the Douglas patent addresses problems of varying operating conditions of mobile web browsers. (See, e.g., column 1, line 29 through column 2, line 13.) Even assuming, arguendo, that the Douglas patent teaches the selection of a network based on various policy considerations, one skilled in the art would not have been motivated to combine a teaching in the context of mobile web browsers to a modem selector at a central office. Accordingly, claims 1, 12 and 20 are not rendered obvious by the McHale and Douglas patents for at least this additional reason.

***Claims 2-11, 13-19 and 21-25***

Claims 2-11, 13-19 and 21-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the McHale patent, in view of the Douglas patent, in further view of Mamakos, "A Method for Transmitting PPP Over Ethernet," Request for Comments 2526 (Internet Engineering Task Force (Feb. 1999)) ("Mamakos"). The applicant respectfully requests that the Examiner reconsider and withdraw this ground of rejection in view of the following.

Mamakos defines a PPPoE standard. However, this standard does not compensate for the deficiencies of the

McHale and Douglis patents with respect to claims 1, 12 and 20. Accordingly, dependent claims 2-11, 3-19 and 21-25 are not rendered obvious by the McHale patent, the Douglis patent, and Mamakos for the reasons discussed above with reference to claims 1, 12 and 20.

### **New claims**

New claims 26-28 depend from claims 1, 12 and 20, respectively, and recite that data looping in the system is prevented. New claim 29 depends from claim 20 and further specifies that the communications links are terminated by simple modems.

### **Amendments to the Specification**


The specification has been amended to correct a few minor errors.

### **Conclusion**

In view of the foregoing amendments and remarks, the applicant respectfully submits that the pending claims are in condition for allowance. Accordingly, the applicant requests that the Examiner pass this application to issue.

Respectfully submitted,

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